

**REMARKS**

Claims 1-13, 15-38, 40-63, 65-103 and 105 are all the claims pending in the application.

***35 U.S.C. § 112, first paragraph, Rejections***

The Examiner has rejected claim 105 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claim 105 recites “comparing the frame number and the timecode associated with the current frame of the low resolution content with a starting frame number and a starting timecode of the low resolution content.” The Examiner acknowledges that the specification discloses identifying a frame number and a timecode associated with a current frame and a starting frame of the lower resolution content and calculating a “delta” by utilizing the frame numbers and timecodes. However, the Examiner asserts that the specification does not disclose how the “delta” is calculated and more specifically that the specification does not disclose comparing the frame numbers and timecodes associated with the current frame and the starting frame as recited in claim 105.

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention.

Applicant respectfully submits that it is well known that a “delta” represents a difference between values. In order to calculate a difference, the values must be compared. Accordingly calculating a delta utilizing said frame numbers and timecodes would necessitate comparing them. Thus, the specification discloses in sufficient detail that one skilled in the art can reasonably

conclude the inventors had possession of the features recited in claim 105. Therefore claim 105 satisfies the written description requirement.

The Examiner has rejected claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, 78, and all claims dependent thereon, under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter not disclosed in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The Examiner acknowledges that the specification discloses identifying a frame number and a timecode associated with a current frame and a starting frame, or another sample frame of the lower resolution content and using two or more calibration points to calculate a “delta” which is used to calculate an offset into the higher resolution content. The Examiner further acknowledges that the specification discloses that by “reading one or more such timecodes and knowing their corresponding frame numbers, the system is able to calibrate itself so that it can calculate the appropriate timecodes corresponding to any frame numbers. It can then find the corresponding frame 106 in the high resolution MPEG2 file 105” (page 10, lines 7-10).

However, the Examiner asserts that the specification fails to describe how the two or more calibration points are used to calculate the “delta” or offset into the higher resolution content. That is, the Examiner asserts that the specification fails to teach one of ordinary skill in the art how to calibrate for an offset of time between the lower resolution content and the higher resolution content by utilizing a frame number and a timecode associated with a current frame without undue experimentation.

The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue

experimentation. The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue.

Applicant notes that although the Examiner identifies the allegedly missing information, the Examiner merely alleges, without any support, that calibrating for the offset would require undue experimentation by a person skilled in the art.

Applicant respectfully submits that the claims satisfy the enablement requirement as it would not take an undue amount of experimentation for a person skilled in the art to determine how to calculate the “delta”. As the Examiner admits, the specification discloses calculating a “delta” using at least two calibration points. Since the “delta” is based on the frame number and timecode of one or more frames of the low resolution content, the “delta” would establish a correlation between the frame numbers and timecodes of the low resolution content. Accordingly, Applicant respectfully submits it would be clear to one skilled in the art, that upon determining the “delta”, or offset, in relation to the frame number and timecode for the lower resolution content, such an offset, for example, may be applied to the starting timecode of a portion of the high resolution content to be retrieved. The applied offset may be used to obtain a starting frame number, and retrieve the portion of the high resolution content corresponding to that starting frame number, in order to be as frame accurate as possible.

Since the specification provides considerable direction and guidance to enable the claims at issue, Applicant respectfully submits that it would not require undue experimentation to practice the invention as described above. Applicant respectfully submits that the claims therefore satisfy the enablement requirement.

Thus, Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

***35 U.S.C. § 103 Rejections***

The Examiner has rejected claims 1-4, 6-13, 15-29, 31-38, 40-54, 56-63, and 65-103 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,211,869 to Loveman et al. (hereinafter "Loveman"), over U.S. Patent No. 7,024,097 to Sullivan, and also over U.S. Patent No. 6,414,725 to Clarin et al. (hereinafter "Clarin"). For at least the following reasons, Applicant respectfully traverses the rejections. The Examiner has rejected claims 5, 30, and 55 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Loveman, Sullivan, and Clarin and also over the "VideoUniversity.com" (hereafter "VideoUniversity") website, and claim 105 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Loveman, Sullivan, and Clarin, and also over U.S. Patent No. 6,360,234 to Jain et al. (hereafter "Jain").

Claim 1 recites a content production system, comprising, *inter alia*, a retrieval apparatus wherein timecodes of lower resolution content and higher resolution content are analyzed for time synchronization of the lower resolution content with the higher resolution content, the time synchronization performed by calibrating for an offset of time between the lower resolution content and the higher resolution content by utilizing a frame number and a timecode associated with a current frame.

In the Amendment of April 16, 2007, Applicant submitted that Loveman fails to teach or suggest verification, analysis or calibration of the timecodes of a lower resolution and corresponding

higher resolution content since Loveman does not even recognize that an offset of time between a lower resolution and corresponding higher resolution content may exist.

In response, the Examiner cites col. 6, lines 31-49 wherein Loveman discloses that the asset manager 734 creates a mapping of a first and second compressed version of multimedia data, such that if a filename and timecode range identifying a portion of the first compressed version is provided, the corresponding portion of the second compressed version is identified.

The Examiner asserts that creating such a mapping necessitates analyzing the timecodes of the first and second compressed versions and that this mapping is indicative of a calibration for an offset of time between the first and second compressed versions. The Examiner further asserts that if there was no offset, no mapping would be necessary since the timecodes of the first compressed version could be used, as is, to retrieve corresponding portions of the second compressed version.

Following the disclosure of Loveman cited by the Examiner, Loveman discloses, in col. 6, lines 50-59, that such a mapping mechanism may maintain indications of high resolution video files which are equivalent to low resolution video files, and this equivalency can be used to associate the appropriate high resolution files with the low resolution files.

Accordingly, the mapping disclosed by Loveman is merely to identify the second compressed version corresponding to a first compressed version. Loveman supports this by requiring that a filename be provided in order to perform the identification. Once the second compressed version is identified, the provided timecodes (i.e. the timecode range) would be used, as is, to retrieve the corresponding portion of the identified corresponding version. Thus, it is respectfully submitted that the assertion in the Office Action is incorrect in that no mapping would be necessary if there was no

offset since Loveman clearly discloses a need for mapping that is unrelated to calibrating for an offset.

In contrast to Loveman, Applicant has recognized that even with the use of timecodes for synchronization, an offset in time may exist between the higher resolution and lower resolution content. Applicant also has recognized that the encoding process needs to ensure the timecodes align as much as possible in order to be as frame-accurate as possible (paragraph [0039]). Accordingly, Applicant has invented a verification process that analyzes the timecodes of the higher and lower resolution content and calibrates for this offset, as reflected in claim 1.

Neither Clarin nor Sullivan, independently or in combination address the above mentioned deficiencies of Loveman.

Therefore, Applicant respectfully submits that claim 1 is patentable over the applied references.

Claims 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, and 78 recite one or more features analogous to those discussed above with respect to claim 1. Specifically, these claims recite “wherein the timecodes of the low resolution content and the high resolution content are analyzed for time synchronization of the low resolution content with the high resolution content, the time synchronization performed by calibrating for an offset of time between the low resolution content and the high resolution content”. Accordingly, Applicant respectfully submits that claims 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, and 78 are patentable over the applied references at least for reasons analogous with those given above with respect to claim 1.

Claims 2-13, 15-21, 23, 25, 27-38, 40-46, 48, 50, 52-63, 65-72, 73, 75, and 79-103 depend on independent claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, or 78. Applicants have already demonstrated that Loveman, Clarin, and Sullivan do not suggest all features of claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, or 78. VideoUniversity and Jain do not compensate for the above-identified deficiencies of Loveman, Clarin, and Sullivan. Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, or 78. Since claims 2-13, 15-21, 23, 25, 27-38, 40-46, 48, 50, 52-63, 65-72, 73, 75, and 79-103 depend on claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, or 78, they are patentable at least by virtue of their dependency.

With regard to claim 105, the Examiner acknowledges that Loveman, Sullivan, and Clarin fail to disclose that “the offset in time between the lower resolution content and the higher resolution content is calibrated by comparing the frame number and the timecode associated with the current frame of the low resolution content with a starting frame number and a starting timecode of the low resolution content,” as recited. The Examiner instead relies on Jain to disclose this feature. Jain discloses Vidsync daemons returning the actual start time to the Cataloger 110, beginning capture of metadata at a nominal T=0 time, and storing each of the actual start times as a delta-time from this T=0 time. Jain merely compares the actual start time (i.e. starting timecode) with the time T=0 (i.e. timecode associated with the current frame). Jain fails to teach or suggest comparing the frame numbers as recited in claim 105.

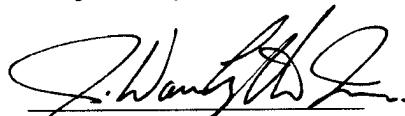
Accordingly, Applicant respectfully submits that claim 105 is patentable over the applied references at least for the reasons given above and by virtue of dependency on claim 1.

***Conclusion***

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



J. Warren Lytle, Jr.  
Registration No. 39,283

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/142133

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